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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/616,809

07/10/2003

Steve O. Rasmussen

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10/14/2004

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

TRAN, LY T

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/616,809	<b>Applicant(s)</b> RASMUSSEN ET AL.	
	<b>Examiner</b> Ly T TRAN	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 46-104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 63, 65, 68-77, 91 and 93-104 is/are allowed.
- 6) ☒ Claim(s) 46-62, 64, 66, 67, 78-90 and 92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 55, 64 and 75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It's unclear how long the length of the trailing end portion of the print media since nothing define where is the begining and where is the end of the trailing end.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 46-62, 64, 66, 67, 78-90 and 92 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshimura (USPN 5,818,487)

With respect to claims 46, 83, 85 and 78 Yoshimura disclosed an apparatus of an inkjet printing system comprising (in the claims the ink is ejected on the second side of the media):

- A primary drive roller rotatably mounted on an entry side of the print zone and adapted to contact the print media and advance the print media through the print zone (FIG. 3: Element 116)
- A pinch roller rotatably mounted opposite the primary drive roller and adapted to contact the print media (FIG. 3: Element 121)
- A secondary drive roller/drive roller rotatably mounted on an exit side of the print zone and adapted to contact a first side of the print media (FIG. 4: Element 126)
- A starwheel (131) rotatably mounted opposite the secondary drive roller and configured to move between a disengaged position in which starwheel is spaced from the media and an engaged position in which the starwheel contacts a second side of the print media (FIG. 4: Element 131);
- Since the applicant did not define the length of the trailing end portion of the print media, it appears that the circumference length of the starwheel disclosed by Yoshimura can be considered greater than a length of the trailing portion of the print media. And since Yoshimura discloses the same structure as the present invention with the starwheel, it appears that the starwheel is adapted to contact the print media for less than one revolution of the starwheel.
- Wherein the starwheel is adapted to be moved to the engaged position after the secondary drive roller contacts the first side of the media (Fig.6: element 131 is in engage position);

- Selectively actuating the wheel includes moving the wheel between a first position in which the wheel is spaced from the print media (fig.4) and a second position in which the wheel contacts the print media including moving the starwheel to the second position and contacting the second side of the media with the starwheel after the drive roller contacts the first side of the media (FIG. 6) and since the applicant does not define the length of the final length of the media, it appears that moving the starwheel to the second position when the final length of the media to be advanced through the print zone is less than a circumference of the starwheel.

With respect to claims 47 and 79, Yoshimura discloses the primary drive roller (element 116) is adapted to contact the first side of the media and the pinch roller (121) is adapted to contact the second side of the print media.

With respect to claims 48 and 80, Yoshimura discloses the print zone is defined to the second side of the print media and the printer is adapted to print on the second side of the print media (FIG. 7).

With respect to claims 49 and 81, the secondary drive roller and starwheel are adapted to advance the print media through the print zone (FIG. 6: Element 126, 131)

With respect to claim 50, Yoshimura discloses the starwheel is adapted to be in the engaged position when the secondary drive roller contacts the first side of the print media (FIG. 6: Element 131)

With respect to claim 51, Yoshimura discloses the print media has a leading portion and a trailing portion, and wherein the starwheel is adapted to be in disengaged

position before the secondary drive roller contacts the leading portion of the print media (Fig.7)

With respect to claim 82, the starwheel is configured to move between a disengaged position in which the starwheel adapted to be spaced from the print media and an engaged position in which the starwheel contacts the second side of the media (FIG. 4: Element 131, Fig.6: element 131), since the applicant does not define how long the final length it appears that the starwheel is adapted to be moved to the engaged position when a final length of the print media to be advanced through the print zone is less than a circumference of the starwheel to contact the print media in the engaged position.

With respect to claim 52, Yoshimura discloses the starwheel is adapted to be moved to the engaged position after the secondary drive roller contacts the leading portion of the media (Fig.6).

With respect to claims 53 and 54, Yoshimura discloses the starwheel is adapted to be in the engaged position after the primary drive roller contacts the trailing portion of the print media and the starwheel is adapted to be in engaged position when the trailing end of the media exit the print zone (fig.7, Column 6: line 48-58).

With respect to claims 55-57 and 92, since the applicant does not define how long of the length of the trailing portion and how long of the final length of the media, it appears that the length of the trailing end portion of the media is less than a circumference of the starwheel and the starwheel is adapted to be moved to the engaged position when a final length of the print media to be advanced through the print

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zone is less than a circumference of the starwheel. And since Yoshimura discloses the same structure as the present invention with the starwheel, it appears that the starwheel is adapted to contact the print media for less than one revolution of the starwheel.

With respect to claim 84, Yoshimura discloses contacting the first side of the media with the drive roller and contacting the second side of the media with the starwheel including advancing the print media through the print zone with the drive roller and the starwheel (Fig.6).

With respect to claims 58, 83, 89, 90 and 86, Yoshimura discloses an apparatus and a method of a printing system (in these claims, the ink ejected on the first side of the media) comprising:

- A printhead assembly adapted to eject ink drops toward a first side of the print media into a print zone between the printhead assembly and the print media to print on the print media (Column 6: Line 7-16);
- Print media transport system adapted to route the media through the print system comprising:
  - A drive roller rotatably mounted on an exit side of the print zone and adapted to contact a second side of the media (fig.3: element 126);
  - A starwheel rotatable mounted opposite the drive roller and configured to move between a disengaged position in which the starwheel is spaced from the media (fig.4) and an engaged position in which the starwheel contacts the first side of the media (Fig.6);

- Wherein the starwheel is adapted to be moved to the engaged position after the drive roller contacts the first side of the media (fig.6);
- Selectively actuating the wheel includes providing the wheel in the first position before contacting the first side of the print media with the drive roller (FIG. 4)
- selectively contact the second side of the print media based on a position of the print media (FIG. 4: Element 131, Fig.6: element 131)
- moving the starwheel to the second position while advancing the media through the print zone (fig.6).

With the claim 59, Yoshimura discloses the drive roller and the starwheel are adapted to advance the print media through the print zone (Fig.7).

With respect to claim 60, Yoshimura discloses the starwheel is adapted to be in the engaged position only when the drive roller contacts the second side of the media (Fig.6).

With respect to claim 61, Yoshimura discloses the media has leading and trailing portion, wherein the starwheel is adapted to be in the disengaged position before the drive roller contacts the leading end of the media (Fig.7).

With respect to claim 62, Yoshimura discloses the starwheel is adapted to be moved to the engaged position after the drive roller contacts the leading portion of the media (Fig.6).

With respect to claims 64, 66-67, 90 and 92, since the applicant did not define the length of the trailing and final portion of the print media, it appears that the



circumference length of the starwheel disclose by Yoshimura can be considered greater than a length of the trailing portion of the print media and the starwheel is adapted to be moved to the engaged position when a final length of the print media to be advanced through the print zone is less than a circumference of the starwheel. And since Yoshimura discloses the same structure as the present invention with the starwheel, it appears that the starwheel is adapted to contact the print media for less than one revolution of the starwheel.

With respect to claim 87, Yoshimura discloses moving the starwheel between first and second position based on the position of the media during printing (Fig.4, 6).

With respect to claim 88, Yoshimura discloses that the starwheel is in the first position while feeding the media into the print zone (Fig.7).

Since Yoshimura discloses the same structure as present invention, the limitation of preventing from contact with the secondary drive roller is just a functional language, does not limit the claimed invention, the apparatus of Yoshimura is capable to operate in any ways that necessary.

### ***Allowable Subject Matter***

3. Claims 63, 65, 68-77, 91 and 93-104 are allowed.

The primary reason for the allowance of claim 68-77 is the inclusion of the limitation of an ink jet print head comprising a platen having the hole opposes less than the entire portion of the dot formation element array with respect to the first direction. It is limitation found in each claims, as it is claimed in the combination, that has not been

found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

### ***Response to Arguments***

4. Applicant's arguments filed 7/22/04 have been fully considered but they are not persuasive.

Applicant argument that the trailing end is defined to be less than a circumference of the starwheel is not persuasive because nothing to define where the beginning and the end of the trailing end of the medium, so the trailing end of Yoshimura can be at the end of the sheet and of course the trailing end must be less than a circumference of the starwheel.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

October 6, 2004



Stephen D. Meier  
Primary Examiner